Examiners' Report
Principal Examiner Feedback

June 2023

Pearson Edexcel Awards
In Number and Measure (ANM20)
Paper 2B

Edexcel Award in Number and Measure (ANM20)
Principal Examiner Feedback – Level 2

General Comments

Overall candidates made better attempts at questions in this series and appeared to be well prepared for the examination.

There were far fewer attempts that resembled trial and improvement approaches, but the inclusion of any working out to support answers remains an issue for some. Candidates also need to be reminded about how they write their numbers. There were examples where numbers were written ambiguously (eg 1s and 7s, 2s and 5s) or numbers over-written, leaving them illegible. But a significant issue in this series was the misreading and miswriting of numbers. On many occasions candidates miscopied numbers from the question, or even their own figures.

Section A is designed to be completed with the aid of a calculator, but the sight of some non-calculator methods would suggest that not all candidates had a calculator. For example, this was apparent in questions 3 and 8 where long multiplication methods were seen.
There were some instances in this paper where working out was set out in a disorganised way that making it difficult to identify a chosen route of solution by the candidate in order to award method marks. Questions 9, 11, 15, and 18 in Section A required several different stages or working. In Section B, question 7 was frequently done using partitioning methods. That said, there was an improvement this series in the way that candidates set out their work.

Candidates need to be reminded to read what form the answer is to be presented in; if an answer is not simplified when asked for, the final mark will be lost. There were a few occasions where several methods were shown by a candidate; unless made clear by the candidate which is to be accepted for marking, no marks can be given.

It was encouraging to find that most candidates attempted nearly every question, in both sections.

Reports on Individual Questions

Question 1

This was a well-answered question. Some candidates failed to include all the values that were given.

Question 2

The most common error was attempting to divide 72 by both 3 and 5. Some added the 3 and 5 to give 9 and then could not remember what to do with the 9. But overall, this was a well answered question.

Question 3

There were many correct answers given, but also many rounding errors. Some rounded incorrectly by giving 83.66, 83.77, or even 184. Some gave their answer in the wrong format by stating 83.6700, or just moved the decimal point to give 8366.67.

Question 4

Most showed 13 : 42 in working to gain the mark. Some gave the answer the wrong way around (42 : 13). The question did not ask for their ratio to be simplified yet many attempted to do so. If the correct answer of 13 : 42 was seen this subsequent work could be ignored, but those who just gave an incorrect ratio without showing the correct ratio first resulted in 0 marks.

Question 5

In this question the common errors were related to poor arithmetical processing, but there were fewer examples of poor place value than in previous series, for this type of question.

In part (a) there were a significant number of candidates using operations incorrectly. For example, by just adding all four numbers or performing 17.3 – 50 and then subtracting the result from another number. Candidates who lost marks confused place value, for example adding 129 to 45.18 to give 46.47.

In part (b) there were many different methods shown, including Napier's bones, grid methods and partitioning methods, even though this was multiplication by just a single digit. But the most common method was the traditional approach. Place value was again an issue here, particularly with grid or partitioning methods, but so was an inability to recall times tables. Those who ignored the decimal point during processing either forgot to put it back or put it back in the wrong place.

Question 6

Part (a) was well answered. In part (b) candidates who lost marks just subtracted across, giving an answer of 6/6 or just 1.

Question 7

Those who knew how to work out a percentage usually gained some credit. Many found 10% then multiplied by 3 to give 30%, but these then had to be subtracted. Some left their answer as the percentage figure (72) and some incorrectly added to 240. Overall, a question that proved to be a good discriminator and provided a good range of marks.

Question 8

In answering part (a) it is important that candidates realise that in these types of question their final answer needs to be supported by working. Credit was sometimes given for an incorrect conclusion linked to their two answers given, as long as a correct method was shown for at least one of these two answers. Whilst many candidates realised that a division of 5 or 6 was needed, this was not always done accurately. Part (b) was well answered, though some attempts were spoilt when candidates used
4 kg = 400 g.

Question 9

A well answered question. Most candidates realised that a division by 7 was needed, and most then went on to multiply their answer by 10, arriving at the correct answer. There were many other different methods in evidence, such as finding the cost of 3 boxes, before adding to the cost of 7 boxes.

Question 10

Candidates who attempted to work this out accurately gained no marks; the question asked for an estimate, and there must therefore be evidence of estimation before any marks are awarded. Those who chose appropriate numbers to use as estimates gained some credit. Poor arithmetic meant that some calculations were inaccurate.

Question 11

Many candidates started by writing 80/400 but were then unable to convert this into a percentage.

Question 12

The key to this question was finding a common denominator. Those who merely showed 4 + 1 or 3 + 2 or equivalent gained no marks. But it was encouraging to see many who wrote or equivalent. Some decided to write their fractions as improper fractions, which could still lead to the correct answer, but then involved more work and larger numbers to deal with. Some disregarded the whole numbers completely. A significant number failed to write their answers as a mixed number as specified, which meant they lost the final mark. Overall, this question was better done than in previous sessions.

Summary

Concluding guidance notes for centres:

- Figures need to be written clearly, and not over-written.
- Candidates need to ensure they copy figures accurately, either from the question, from their calculator, or from their own working.
- Candidates need to ensure they arrive to take the examination with all necessary equipment, which includes a calculator for Section A.
- Working needs to be presented legibly and in an organised way on the page, sufficient that the order of the process of solution is clear.
- Basic numeracy such as addition/subtraction needs practice.
- Times tables need to be learned.
- Candidates need to spend more time ensuring they read the fine detail of the question to avoid giving answers that do not answer the question, and to give answers in the form required, such as simplified if asked for.